



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
<http://www.epa.gov/region08>

FEB 11 2009

Ref: EPR-N

Mary Morgan
Acting Forest Supervisor
c/o Roger Poirier
White River National Forest
P.O. Box 948
Glenwood Springs, CO 81602-0948

Re: Vail Ski Area Improvements Project
White River National Forest
Draft Environmental Impact Statement
CEQ# 20080532

Dear Ms.Morgan:

The U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the Draft *Environmental Impact Statement* (EIS) for the Vail Ski Area Improvements Project on the White River National Forest (WRNF). With this proposal, the U.S. Forest Service (USFS) proposes to upgrade Chair #5, construct a new Sun Down Chairlift, convert an existing snowcat maintenance facility (at Snow Summit) into a lift maintenance facility, construct a new on-mountain snowcat maintenance facility adjacent to Snow Summit, add snowmaking infrastructure on the Simba trail, expand the Golden Peak Race Venue, and construct a new restaurant in the Mountain Top area. We provide these comments in accordance with our authorities and responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The DEIS states that expediting mountain circulation and afternoon egress between Vail Mountain and the Vail Village/Lionshead base areas is a primary driver of this project. This need is largely a result of Vail's expansion into the Category III Blue Sky Basin. EPA is concerned that the proposed resolution to this need is to add more lifts to move people from the back side to the front-side, resulting in more environmental impacts. We believe that the discussion of recreation capacity should be balanced against an analysis of ecosystem capacity. In our scoping comments, EPA noted that circulation and egress concerns were raised during the NEPA review of the Category III expansion. We asked that the issues raised during that previous decision be fully disclosed in the DEIS. The Forest Service could use this information to understand the likely impacts of the proposed action on the WRNF's long-term ecosystem health. EPA also believes there are more environmentally protective alternatives to addressing circulation and egress concerns that were not analyzed in the DEIS that should be included in the FEIS.

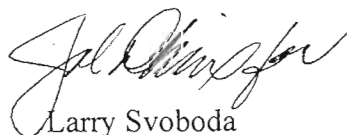
EPA is pleased to see that the Proposed Action was modified in response to concerns raised in scoping and resource issues that emerged through site-specific environmental analysis. In particular, we support the elimination of additional snowmaking infrastructure on Ledges and Upper Born Free ski runs due to hydrologic issues, and to minimize potential impacts to Mill Creek. The Mill Creek reaches exhibit At Risk and Diminished stream health due to unstable banks, conditions that would likely worsen with the addition of snowmaking. EPA also supports the decision to eliminate maintained access to West Earl's Bowl terrain in the Proposed Action. This modification is consistent with USFS's Category III expansion commitments to protect lynx denning/foraging habitat.

As noted above, EPA remains concerned with the range of alternatives, and the commitment of more federal land to impacts from recreation, with no increase in the number of skiers served. EPA believes there are less intrusive ways to improve skier circulation and distribution on the mountain that should have been analyzed in the DEIS. The DEIS also fails to consider the impact of the massive die-off of lodgepole pines due to the mountain pine beetle (MPB) epidemic. Skier mobility will likely change dramatically when the entire ski area turns into open glade skiing. EPA's other concerns include direct and indirect impacts to Waters of the U.S., impacts of snowmaking on aquatic resources, cumulative impacts from growth and redevelopment, lack of analysis of energy use and greenhouse gas emissions, and the lack of consideration for the impacts of climate change on aquatic resources, snowmaking and Vail's ski area operations in general.

EPA evaluates the potential effects of proposed actions and the adequacy of the information in the DEIS. We rate this DEIS an "EC-2" (environmental concerns, insufficient information) under EPA's enclosed ratings criteria. The EC rating indicates that the reviewer has identified environmental impacts that should be avoided in order to adequately protect the environment. These are described in the attached comments. We also recommend additional analysis and information to fully assess and mitigate all potential impacts of the management action.

EPA appreciates the opportunity to review and comment on the DEIS. These comments are intended to ensure a comprehensive assessment of the project's environmental impacts, adequate public disclosure and an informed decision-making process for alternative selection. If you have any questions or would like to discuss our comments, please contact me at 303-312-6004 or Jody Ostendorf (303-312-7814) of my staff.

Sincerely,



Larry Svoboda
Director, NEPA Program
Office of Ecosystems Protection and Remediation

Detailed Comments

Ecosystem Capacity vs. Recreation Capacity

The DEIS states that Vail is not proposing to alter its “manage to” number of 19,900 daily guests. Rather, the proposal is tailored to improve Vail’s ability to respond to its changing market/guest demands, expectations and preferences – both in the near and long-term (page 1-3). In effect, this proposal will commit more federal land to impacts from recreation, with no increase in the number of skiers served. While the DEIS includes an analysis of recreation capacity, the analysis does not consider long-term ecosystem capacity. The FEIS should include a cumulative impacts analysis that summarizes the impacts from the initial resort development, previous expansions and future expansions on environmental resources, such as wildlife habitat, wetlands and water quality.

Alternatives

EPA believes that reasonable alternatives potentially meeting the underlying Purpose and Need were not rigorously explored in the DEIS. For the recreation component, EPA would like to have seen an alternative analyzed to improve circulation and skier distribution (i.e., Purpose #1 and #2, page 1-3,4) such as using the proposed upgrade of Chair 5 (existing - old slow chair to a new, detachable, high speed) in combination with additional grooming of the Sun Down Bowl (SDB). Increased grooming of SDB, which currently is rarely, if ever, groomed, would bring significantly larger crowds (improved circulation and distribution) into the bowl with improved access to more skier levels. This small skier management technique could greatly increase skier use into the SDB without building the proposed SDB Express lift.

Furthermore, the DEIS fails to consider alternatives appropriate to likely future conditions. Over the next several years Vail mountain will be denuded of forest cover due to the mountain pine beetle epidemic. Skier distribution and circulation will likely change dramatically once the entire ski area turns open glade skiing. The FEIS should analyze that alternative, or at least a broader set of alternatives, that could meet the underlying purpose and need of the action. EPA notes that if Vail constructs the SDB Express, they will likely begin grooming consistently, which would draw more skiers of all levels anyway. This has been demonstrated by the recent construction of Lift 17 in Sun Up Bowl (SUB) which was accompanied by greatly increased grooming schedules for that Bowl.

The DEIS should have also considered a new, less-intrusive surface lift serving the minimal “self-propelling” distance between the summit of Chair 5 and the top of SDB or Wildwood Express as a reasonable alternative for improving skier circulation and afternoon egress between Vail Mountain and Lionshead (Purpose #1) as well as improving skier/rider access to SDB (Purpose #2). For example, Vail recently constructed two surface lifts to improve

skier circulation and access on Tea Cup and China Bowls. This is a proven technique and should have been analyzed in the DEIS.

EPA believes that the lack of alternatives explored in the DEIS is a flaw. Multiple options that are typical ski area management operations/techniques to improve skier circulation and skier density should be analyzed and disclosed in the FEIS.

Direct and Indirect Impacts to Waters of the U.S.

The construction of the SDB Express lift and Chair 5 replacement lift will impact approximately 1.4 acres through grading and raising the elevation of the base area. These lifts are located at the bottom of two drainages, the confluence of the SDB Creek and SUB Creek. These creeks are probably ephemeral but do have adjacent wetland vegetation. The document states that no wetlands will be affected by the proposed project (pg 1-14) but waters of the U.S. may be present on the site. EPA is very concerned that the document discounts impacts to wetlands but the project may have impacts to waters of the United States. The Protection of Wetlands: Executive Order 11990 requires the Forest Service to show "there is no practicable alternative" to the proposed action and "that the proposed action includes all practicable measures to minimize harm to wetlands." The FEIS needs to clearly demonstrate that the Forest Service has fulfilled that requirement.

Snowmaking and Aquatic Resource Issues

EPA is concerned about the impacts of depletions from additional snowmaking and lack of disclosure in DEIS. The DEIS (page 3-148) describes the fact that Vail Resorts has water rights for additional withdrawals related to proposed snowmaking and the ability to maintain in-stream flows in Gore Creek. However, the timing and magnitude of withdrawals are not disclosed, and potential adverse impacts to the aquatic habitat in Gore Creek are not described. These diversions are typically taken during low flow periods and the DEIS should disclose the amount of habitat loss or degradation when compared to the no action (baseline) alternative. The DEIS uses stream health as a proxy for impacts to aquatic resources. Because stream health is negatively affected by the proposed action, EPA believes a more direct assessment of aquatic communities and their habitat is necessary. The FEIS should include an analysis of impacts to habitat availability and habitat quality that includes fish and macroinvertebrate sampling as well as a suite of habitat variables, where data is available. These analyses should address potential impacts from additional diversion as well as changes in water yield due to snowmaking. In addition, EPA requests that flow information be provided in the following forms: estimates of virgin flow at the structures, total annual flow diverted, total monthly flow diverted, and diverted flow/virgin flow as a proportion.

The Proposed Action would add snowmaking coverage on approximately 78 acres of terrain on the front side of Vail Mountain. The DEIS does not identify the public purpose for the use of snowmaking on National Forest System lands. The adverse impacts to aquatic resources (including past, present and future reasonably foreseeable development (RFD) impacts) should be fully evaluated and disclosed, including the amount of additional water needed for this action.

EPA is particularly concerned that 40 of the additional acres of snowmaking coverage will support the expanded racing terrain in Golden Peak, where drainage issues persist as a result of connected graded terrain. Expanding the graded terrain will increase even further direct surface flows to the stream system, exacerbating impacts to an already impacted drainage system. The FEIS should identify mitigation commitments, such as improved vegetative cover and reconstruction of water bars, to prevent increased delivery of sediment to Mill and Gore Creeks. The FEIS should also describe any site-specific design criteria that will ensure stream health is improved or, at least, not further compromised as a result of snowmaking.

Growth

The DEIS does not address how the proposed action will indirectly impact growth in Vail, including increased traffic, increased impervious surfaces, etc. The proposal to move snow maintenance facilities from private to public land should disclose impacts associated with the reasonably foreseeable redevelopment of the Vail property in the Lionshead area. Vail's request to move the maintenance facilities onto National Forest is likely due to the high valued real estate currently being used as snow vehicle storage and maintenance. The Forest Service should disclose the RFD environmental impacts (cumulative impacts) associated with this redevelopment in the FEIS. Wetlands and waters of the U.S. may be impacted with this RFD proposal and should be disclosed as a cumulative impact of this FEIS action.

Impacts of Lodgepole Pine Mortality

The DEIS states that "increased water yield is expected in all of the project area watersheds as a result of lodgepole pine mortality" (page 3-105). While that is one impact of the mountain pine bark beetle epidemic, EPA would have liked to see more analysis of how tree mortality will exacerbate erosion problems associated with forest roads, increase sediment loads to water ways, impacting wildlife and aquatic habitat, and cause other changes in physical and biological components of streams. Furthermore, pine beetle kill on the mountain will likely open large areas of forested areas. The DEIS should have evaluated whether improved circulation in other sections of the mountain (alternatives) could have a net improvement to skier distribution, as opposed to current circulation solutions proposed in this proposal. For example, the DEIS indicates that approximately 90-95 percent mortality of mature lodgepole pine is to be expected within and surrounding the Special Use Permit boundary. This alternative should also be considered for circulation improvements, in lieu of expanding outside the current footprint of the resort.

Energy Use

The FEIS should include a discussion of energy use and greenhouse-gas emissions, and disclose any energy reduction efforts or renewable energy strategies Vail is employing through this project and its general operations. Included in the January 24, 2007 Executive Order released by the Office of the Federal Environmental Executive, "Strengthening Federal Environmental, Energy and Transportation Management" (EO 13423,

<http://www.whitehouse.gov/news/releases/2007/01/20070124-2.html>) are requirements that federal agencies:

- Reduce energy intensity three percent annually through the end of fiscal year 2015, or 30 percent by end of the fiscal year 2015, relative to the baseline of the agency's energy use in fiscal year 2003;
- Beginning in FY2008, reduce water consumption intensity, relative to the baseline of the agency's water consumption in fiscal year 2007, through life-cycle cost-effective measures by two percent annually through the end of fiscal year 2015 or 16 percent by the end of fiscal year 2015;
- Ensure that at least half of the statutorily required renewable energy consumed by the agency in a fiscal year comes from new renewable sources and, to the extent feasible, the agency implements renewable energy generation projects on agency property for agency use.

Climate Change

The DEIS does not consider how climate change may affect the viability of the proposed project. The 2006 Colorado College State of the Rockies Report Card released climate model results which predicted dramatic snowpack loss in the Rocky Mountain West, with projected ski-area snowpack loss by 2085 in Eagle County of 57 percent (<http://www.coloradocollege.edu/stateoftherockies/06ReportCard.html>). The Report Card also predicted warmer winters and shorter snow seasons, with more of the region's precipitation coming in the form of rain instead of snow. Because of expected snowpack loss due to climate warming, existing and expanded snowmaking infrastructure will require exponentially increased volumes of water to sustain the same level of coverage. This can lead to worsening water quality as streams are depleted, wetlands are drained and habitat is lost. The FEIS should analyze and disclose the potential effects of climate change on the project, project adaptation measures that would be employed, and the potential impacts of these measures on the environment.